# Supporting information

CQDs/ZnO Composite Based on Waste Rice Noodles: Preparation and Photocatalytic Capability
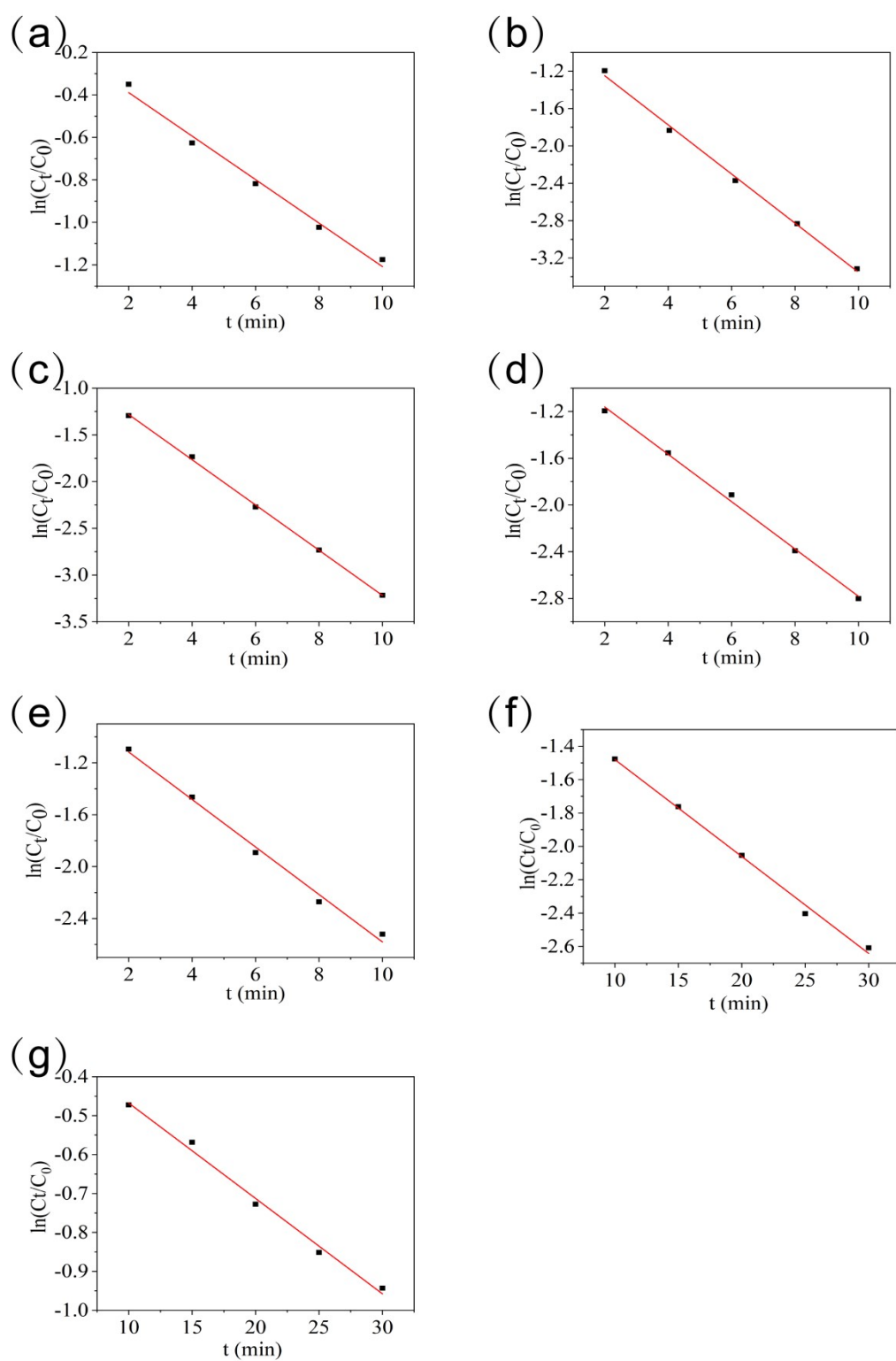
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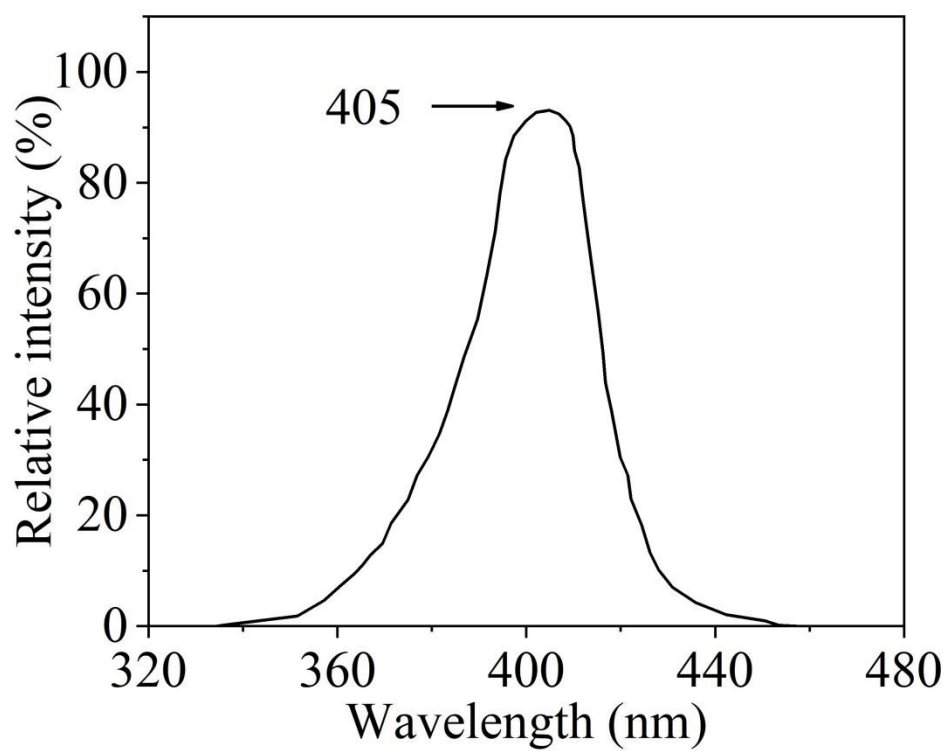
Figure S-1   The emission spectrum of the 405 nm purple light lamp.

Figure S-2 The pseudo-first-order kinetic fitting of photocatalytic degradation of CQDs/ZnO–1 sample (a), CQDs/ZnO–2 sample (b), CQDs/ZnO–3 sample (c), CQDs/ZnO–4 sample (d), CQDs/ZnO–5 sample (e), CQDs/TiO$_2$ (f) and commercial ZnO (g) to methylene blue within different irradiation times under 405 nm purple light.
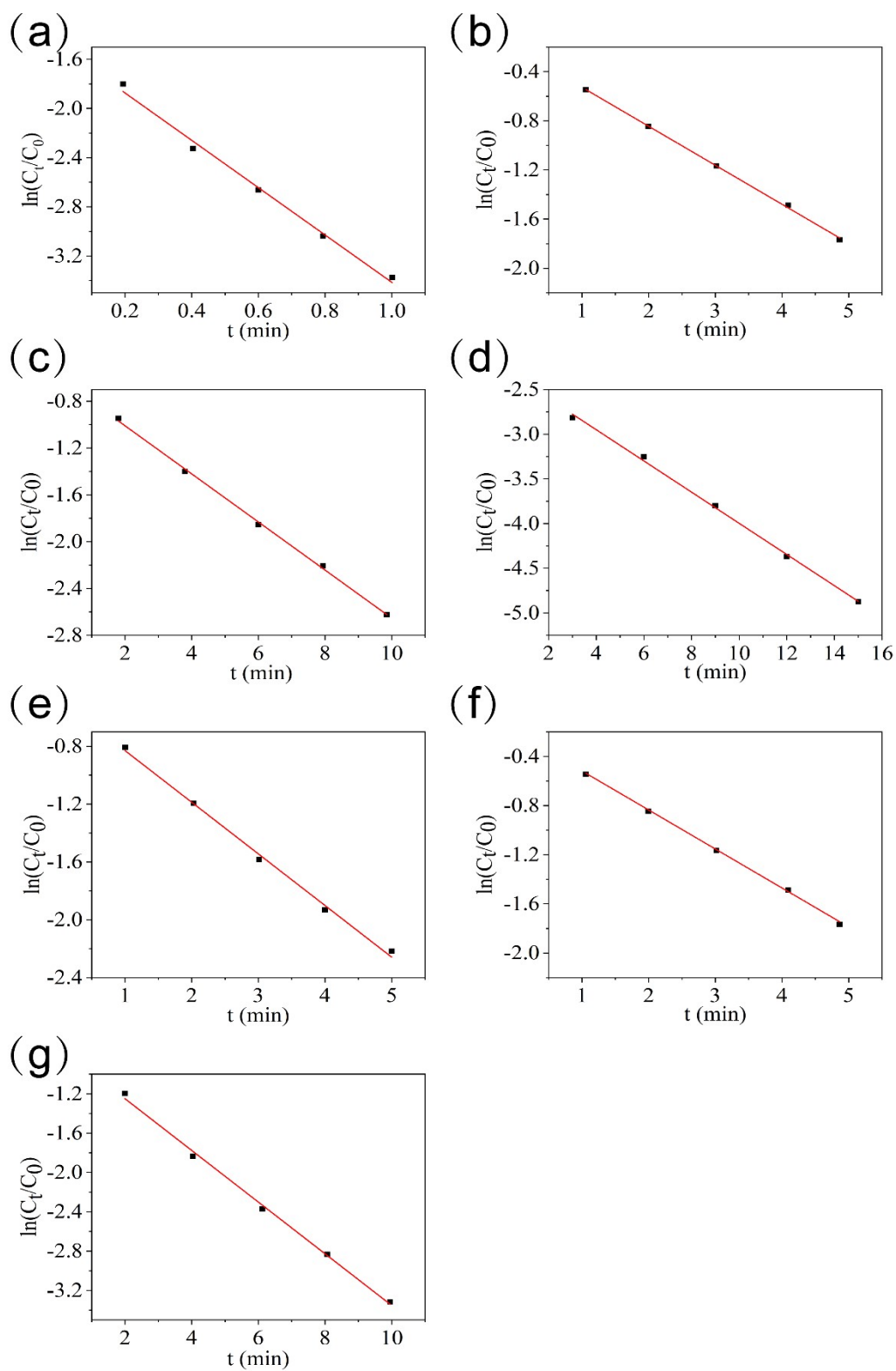
Figure S-3 The pseudo-first-order kinetic fitting of photocatalytic degradation of CQDs/ZnO composite to malachite green (a), methyl violet (b), basic fuchsin (c), rhodamine B (d), tetracycline (e), aniline (f) and methylene blue (g) within different irradiation times under 405 nm purple light.

Table S-1   The kinetic parameters obtained for the photocatalytic degradation of different photocatalysts under 405 nm purple light.

Photocatalysts	K_{app} (min^{-1})	R^2
CQDs/ZnO-1	0.1024±0.0061	0.9895
CQDs/ZnO-2	0.2630±0.0081	0.9972
CQDs/ZnO-3	0.2420±0.0037	0.9993
CQDs/ZnO-4	0.2026±0.0067	0.9968
CQDs/ZnO-5	0.1829±0.0089	0.9930
CQDs/TiO$_2$	0.0581±0.0023	0.9953
ZnO	0.0243±0.0013	0.9924

Table S-2 The kinetic parameters obtained for the photocatalytic degradation of various organic pollutants under 405 nm purple light.

Organic pollutants	K_{app} (min^{-1})	R^2
methylene blue	0.2630±0.0081	0.9963
malachite green	1.9260±0.0910	0.9911
methyl violet	0.3175±0.0088	0.9970
basic fuchsin	0.2056±0.0041	0.9984
rhodamine B	0.1745±0.0041	0.9978
tetracycline	0.3573±0.0119	0.9956
aniline	0.0187±0.0001	0.9971